U.S. Army Corps of Engineers Proposed Procedures and Criteria for Permitting Projects Under a Programmatic Determination of

Not Likely to Adversely Affect Select Listed Species or Critical Habitat in the North Atlantic District (NAD) (2017 NLAA Program)

The U.S. Army Corps of Engineers (USACE) North Atlantic Division and NOAA Fisheries Greater Atlantic Regional Fisheries Office ["GARFO"] have jointly developed the following procedures and project design criteria (PDC) for USACE-permitted projects to streamline section 7 consultation under the Endangered Species Act (ESA) (2017 NLAA Program). USACE has determined that adoption of these procedures and PDC by the NAD (New England, New York, Philadelphia, Baltimore, and Norfolk Districts) ensure that the proposed projects throughout the NAD described herein are "not likely to adversely affect" listed species or designated critical habitat within the geographic areas covered by the Division. Additionally, these procedures are "not likely to adversely affect" proposed critical habitat for Atlantic sturgeon, and thus no conference is necessary at this time. "Not likely to adversely affect" activities have effects that are insignificant (so small they cannot be meaningfully measured or detected) or discountable (extremely unlikely to occur). These procedures and PDC are the basis for USACE's request to GARFO for concurrence with a "not likely to adversely affect" programmatic determination for the project types described in this document and referred to as the 2017 NLAA Program. USACE will use these procedures and PDC to screen all potentially applicable projects for this streamlined consultation process under the 2017 NLAA Program. Details are described below.

Procedural Overview:

Following GARFO's concurrence with this programmatic determination, the review process for project eligibility under the 2017 NLAA Program will be implemented as follows by both agencies.

Project Verification

- 1) USACE will review proposed projects received by applicants to determine that a) the project is eligible for inclusion in the 2017 NLAA Program based on activity type and b) the project meets all applicable PDC, as laid out by the 2017 NLAA Program, ensuring the project is "not likely to adversely affect" listed species and critical habitat.
- 2) If USACE or GARFO determines that a project may affect listed species or critical habitat as per 50 CFR 402, but does not meet the procedures and PDC of the 2017 NLAA Program, or if there are species or critical habitat within the action area that effects have not been analyzed for under the 2017 NLAA Program, USACE will make an effects determination(s) and will initiate individual section 7 consultation (either formal or informal, as appropriate) with GARFO.
- 3) Once a project has been determined as eligible for the 2017 NLAA Program, USACE will

complete the project verification form that provides the following information to GARFO: the project location (latitude and longitude in decimal degrees and datum used; county; waterbody name); project type; brief project description, and USACE's determination and rationale for how the project meets the appropriate PDC contained herein. USACE will provide this form to GARFO with adequate time for permit approval that allows GARFO 30 days to respond. All verification forms should be sent to the following email address:

nmfs.gar.esa.section7@noaa.gov. If GARFO concurs, GARFO will respond within 30 days by signing the form and returning it to USACE. Both agencies will keep a record of these forms for annual monitoring purposes and to assess potential cumulative effects.

4) GARFO will provide USACE with the most recent Federal Register notices and other relevant documents pertaining to covered species' location, distribution, timing, habitat requirements, and current information regarding critical habitat delineation and primary biological factors so that documents related to the 2017 NLAA Program may be updated as necessary.

Annual Monitoring

- 1) USACE will annually meet with GARFO in March, and as needed, to evaluate and discuss the continued effectiveness of these procedures and PDC for avoiding adverse effects to listed species and critical habitat, and to update procedures, PDC, and maps, if necessary. The agencies will work together to plan an annual meeting during March of each year with a specific date based on the availability of the Annual Report (see below).
- 2) This programmatic determination does not have an expiration date. USACE and GARFO may end the 2017 NLAA Program at any time or reinitiate the programmatic informal consultation if either determines that it is not being implemented as intended, or new information requires reinitiation of consultation. For example, GARFO will revoke their programmatic concurrence if USACE fails to provide annual reports. GARFO may also revoke any programmatic concurrence provided for individual projects at any time if information is provided that supports such a revocation.
- 3) Annual reporting requirements include the following: each year no later than March 1, USACE will provide a spreadsheet to GARFO identifying these attributes for projects USACE permitted under the 2017 NLAA Program during the previous year:
 - a. project type,
 - b. date,
 - c. description of action (acreage of impact, dredge volumes if applicable),
 - d. USACE file number,
 - e. permit type
 - f. location coordinates (latitude, longitude in decimal degrees),
 - g. permittee,
 - h. number of project vessels
 - i. listed species and designated critical habitat in the action area,
- 4) If adaptive measures to this agreement are necessary, they will be explored during the annual meeting described above. The annual report to GARFO will be submitted to

nmfs.gar.esa.section7@noaa.gov.

Description of the Action Area and Activity Types

The action area for the proposed 2017 NLAA Program includes all aquatic habitats where NOAA-Fisheries listed species occur from Maine to Virginia, including any critical habitat designated for those species. This includes, but is not limited to, coastal waters as well as tidal rivers and tributaries. The action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50CFR§402.02). USACE may use a variety of permits to authorize projects eligible for the 2017 NLAA Program including Regional General Permits (RGPs), State Programmatic General Permits (SPGPs), Nationwide Permits (NWP), and individual permits such as Letters of Permission (LOP) or Standard Permits.

We have determined that the following activity categories are not likely to adversely affect species listed by NOAA Fisheries and are eligible for inclusion under the 2017 NLAA Program. Please see the PDC below for specific information regarding restrictions on size, timing, etc.:

- 1. Aquaculture (shellfish) and artificial reef creation
- 2. Routine maintenance dredging and disposal/beach nourishment
- 3. Piers, ramps, floats, and other structures
- 4. Transportation and development (e.g., culvert construction, bridge repair)
- 5. Mitigation (fish/wildlife enhancement or restoration)
- 6. Bank stabilization and dam maintenance

We have identified that projects in these six categories may result in the following stressors on ESA-listed species and critical habitat.

Table 1: NLAA Activity/Stressor Categories

	Stressor Category					
Activity Category	Entanglement	Sound Pressure	Impingement/ Entrapment/ Capture	Turbidity/ Water Quality	Vessel Traffic	Habitat Mod.
Aquaculture (shellfish) and artificial reef creation	Y	N	N	Y	Y	Y
Routine maintenance dredging and disposal/beach nourishment	N	N	Y	Y	Y	Y
Piers, ramps, floats, and other structures	Y	Y	N	Y	Y	Y
Transportation and development (e.g., culvert construction, bridge repair)	N	Y	N	Y	Y	Y

Mitigation	N	N	N	Y	Y	Y
(fish/wildlife						
enhancement or						
restoration)						
	34		-			
Bank stabilization and	N	Y	N	Y	Y	Y
dam maintenance						

Projects can still be eligible for programmatic consultation provided that they do not introduce any new stressors or any new direct or indirect effects that are not considered in the Stressor Specific PDC section below, and in the analysis within the complementary consultation document. Projects must also meet all of the PDCs, or provide proper justification for why the project does not meet particular PDCs, but is still NLAA ESA-listed species or critical habitat.

NOAA Fisheries ESA-Listed Species and Critical Habitat in the Action Area

This programmatic determination applies to the list of species below and to their designated critical habitats, as applicable. USACE will seek technical guidance from GARFO for assistance prior to project authorization, if necessary. For the best available information about the life stages of species present throughout the action area, USACE will regularly check GARFO's website at:

https://www.greateratlantia fisheries peep gov/protected/section7/guidance/maps/index html We incorporate life stage information by reference below. Critical habitat has been designated for some of the species on the following list.

Table 2: NOAA Fisheries ESA-Listed Species and Critical Habitat in the Action Area

Species	ESA	Expected	Expected Behaviors	Expected	Listing	Most	Effect
	Status	Life Stages	Benaviors	TOY	Rule/Date	Recent recovery	determin ation
		Suges				plan date	ution
North Atlantic Right Whale	Е	Adults; Juveniles	Foraging; Wintering; Migrating	Year round (greatest densities January to April)	73 FR 12024	NMFS 2005	NLAA
Fin Whale	Е	Adults; Juveniles	Foraging; Wintering; Migrating; Calving	Year round	35 FR 18319	NMFS 2010	NLAA
Kemp's Ridley Sea Turtle	Е	Juveniles	Foraging; Migrating	May to November	35 FR 18319	NMFS et al. 2011	NLAA
Leatherback Sea Turtle	Е	Adults; Juveniles	Foraging; Migrating	May to November	35 FR 849	NMFS & USFWS 1992	NLAA
Loggerhead Sea Turtle; Northwest Atlantic DPS	Т	Adults; Subdults; Pelagic/ benthic juveniles	Foraging; Migrating	May to November	76 FR 58868	NMFS & USFWS 2008	NLAA
Green Sea Turtle; North Atlantic DPS	Т	Adults; Juveniles	Foraging; Migrating	May to November	81 FR 20057	NMFS & USFWS 1991	NLAA

Atlantic	Е	All life	Spawning and	Year round	77 FR	N/A	NLAA
sturgeon (all	(GOM)	stages	Rearing (specific		5880 and		
5 DPSs)	T	(eggs to	rivers); Foraging;		77 FR		
	(four	adults)	Overwintering;		5914		
	others)		Migrating				
Shortnose	Е	All life	Spawning and	Year round	32 FR	NMFS	NLAA
sturgeon		stages	Rearing (specific		4001	1998	
		(eggs to	rivers); Foraging;				
		adults)	Overwintering;				
			Migrating				
Atlantic	Е	All life	Foraging,	April to	74 FR	NMFS &	NLAA
salmon; Gulf		stages	Migrating,	November	29344	USFWS	
of Maine		(eggs to	Spawning,	(marine/estu		2016	
DPS^1		adults)	Rearing,	arine areas);			
210			Overwintering	Year round			
				(freshwater			
				areas)			

The physical and biological features (PBFs) of Atlantic salmon and proposed Atlantic sturgeon critical habitat are described below:

Table 3: PBFs for Proposed Atlantic Sturgeon Critical Habitat

1.	Hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low
	salinity waters (i.e., 0.0-0.5 parts per thousand range) for settlement of fertilized eggs,
	refuge, growth, and development of early life stages;
2.	Aquatic habitat with a gradual downstream salinity gradient of 0.5-30 parts per
	thousand and soft substrate (e.g., sand, mud) downriver of spawning sites for juvenile
	foraging and physiological development.
3.	Water of appropriate depth absent physical barriers to passage (e.g., locks, dams,
	reservoirs, gear, etc.) between the river mouth and spawning sites necessary to
	support: (1) unimpeded movements of spawning adults to and from spawning sites;
	(2) as well as seasonal and physiologically-dependent movement of juvenile Atlantic
	sturgeon to appropriate salinity zones within the river estuary; (3) staging, resting, or
	holding of subadults or spawning condition adults. Water depths in main river
	channels must also be deep enough (e.g., ≥ 1.2 m) to ensure continuous flow in the
	main channel at all times when any sturgeon life stage would be in the river;
4.	Water, especially in the bottom meter of the water column, with the temperature,
	salinity, and oxygen values that, combined, support: (1) spawning; (2) annual and
	interannual adult, subadult, larval, and juvenile survival; and (3) larval, juvenile, and
	subadult growth, development, and recruitment (e.g., 13°C to 26° C for spawning
	habitat and no more than 30° C for juvenile rearing habitat and 6 mg/L dissolved
	oxygen for juvenile rearing habitat)

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¹ The U.S. Fish and Wildlife Service (USFWS) has jurisdiction of Atlantic salmon in the freshwater portion of its range (except for work on hydropower dams), while NOAA Fisheries has jurisdiction of Atlantic salmon in tidal and marine portions of its range.

Table 4: PBFs for Atlantic Salmon (GOM DPS) Critical Habitat

	Spawning and Rearing Critical Habitat
1.	Deep, oxygenated pools and cover (e.g., boulders, woody debris, vegetation) near freshwater spawning sites necessary to support adult migrants during the summer while they await spawning in the fall.
2.	Freshwater spawning sites that contain clean, permeable gravel and cobble substrate with oxygenated water and cool water temperatures to support spawning activity, egg incubation, and larval development.
3.	Freshwater spawning and rearing sites with clean, permeable gravel and cobble substrate with oxygenated water and cool water temperatures to support emergence, territorial development, and feeding activities of Atlantic salmon fry.
4.	Freshwater rearing sites with space to accommodate growth and survival of Atlantic salmon parr.
5.	Freshwater rearing sites with a combination of river, stream, and lake habitats that accommodate Atlantic salmon parrs' ability to occupy many niches and maximize parr production.
6.	Freshwater rearing sites with cool, oxygenated water to support growth and survival of Atlantic salmon parr.
7.	Freshwater rearing sites with diverse food resources to support growth and survival of Atlantic salmon parr.
	Migration Critical Habitat
8.	Freshwater and estuary migratory sites free from physical and biological barriers that delay or prevent access of adult salmon seeking spawning grounds needed to support recovered populations;
9.	Freshwater and estuary migration sites with abundant, diverse native fish communities to serve as a protective buffer against predation; and
10.	Freshwater and estuary migration sites free from physical and biological barriers that delay or prevent emigration of smolts to the marine environment.

Table 5: PBFs for North Atlantic Right Whale Critical Habitat

1.	The physical oceanographic conditions and structures of the Gulf of Maine and
	Georges Bank region that combine to distribute and aggregate <i>Calanus finmarchicus</i>
	for right whale foraging, namely prevailing currents and circulation patterns,
	bathymetric features (basins, banks, and channels), oceanic fronts, density gradients,
	and temperature regimes;
2.	Low flow velocities in Jordan, Wilkinson, and Georges Basins that allow diapausing
	C. finmarchicus to aggregate passively below the convective layer so that the
	copepods are retained in the basins;
3.	Late stage <i>C. finmarchicus</i> in dense aggregations in the Gulf of Maine and Georges
	Bank region;

4. Diapausing *C. finmarchicus* in aggregations in the Gulf of Maine and Georges Bank region.

Project Design Criteria (PDC)

USACE and GARFO developed PDC for the listed activity types described below based on past programmatic and individual consultations, and by reviewing USACE's previously authorized activities over the past 5 years. Projects that fit within the PDC may be included in this NLAA Program. Not likely to adversely affect activities that do not fit into these PDC will not be included in the 2017 NLAA Program, but must be consulted on separately through and individualized consultation, pursuant to procedures as detailed at

https://www.greateratlantic.fisheries.noaa.gov/protected/section7/index.html for informal determinations. In situations where the activity may adversely affect a listed species, a formal consultation is required.

Criteria for all projects are listed first, followed by specific criteria related to stressors that may result from the activities included under this program. USACE has determined that any projects included under the 2017 NLAA Program are not likely to adversely affect listed species individually, or cumulatively as a program because: 1) the projects will be implemented at a time when listed species are not present in the action area; or 2) the projects will be implemented according to PDC that minimize effects to listed species and/or critical habitat and the response of any exposed individuals will be insignificant or discountable, individually and cumulatively. Similarly, USACE has determined the projects included in this programmatic determination are not likely to adversely affect the critical habitats of listed species in the action area because: 1) the projects will be implemented in areas not designated as critical habitat, or 2) the projects will be implemented according to PDC that minimize exposure of primary biological features (PBFs) of critical habitat to adverse effects so that any effects are insignificant and/or discountable, individually and cumulatively.

Criteria for all Project Types

In order to be eligible for streamlined consultation (using the verification form) under the 2017 NLAA Program, all projects must meet the following PDC, regardless of activity type, or provide a justification for why the criteria do not apply. That justification will then be reviewed by the GARFO section 7 biologist assigned to the project. If the GARFO section 7 biologist does not accept the justification, USACE will complete an individual consultation to receive NLAA concurrence. These PDC apply to all activities that may be consulted upon under the program with specific work windows included for each of USACE's Districts within the NAD.

General PDC:

- 1. No work will individually or cumulatively have an adverse effect on ESA-listed species or designated critical habitat; no work will cause adverse modification or destruction to proposed critical habitat.
- 2. No work will occur in the tidally influenced portion of rivers/streams where Atlantic salmon presence is possible from April 10–November 7.

- 3. No work will occur in Atlantic or shortnose sturgeon spawning grounds* as follows:
 - i. New England: April 1–August 31
 - ii. New York/Philadelphia: March 15-August 31
 - iii. Baltimore/Norfolk: March 15-July 1 and September 15-November 1
- 4. No work will occur in shortnose sturgeon overwintering grounds* as follows:
 - i. New England District: October 15-April 30
 - ii. New York/Philadelphia: November 1-March 15
 - iii. Baltimore: November 1-March 15
- 5. Within designated Atlantic salmon critical habitat, no work will affect spawning and rearing areas (PBFs 1-7 in Table 4).
- 6. Within proposed/designated Atlantic sturgeon critical habitat, no work will affect hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand)(PBF 1 in Table 3).
- 7. Work will not change temperature, water flow, salinity, or dissolved oxygen levels.
- 8. If it is possible for ESA-listed species to pass through the action area, a zone of passage with appropriate habitat for ESA-listed species (e.g., depth, water velocity, etc.) must be maintained (i.e., physical or biological stressors such as turbidity and sound pressure must not create barrier to passage).
- 9. Any work in designated North Atlantic right whale critical habitat must have no effect on the physical and biological features (PBFs 1-4 in Table 5).
- 10. The project will not adversely impact any submerged aquatic vegetation (SAV).
- 11. No blasting will occur.

https://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html. This site should be regularly checked for up to date information as projects are processed through the 2017 NLAA program for the time period the program is proposed for.

Stressor Specific Project Design Criteria (PDC)

PDC for all project types and all NOAA Fisheries-listed species covered by this 2017 NLAA Program are presented by stressor below. For each stressor, we include prescriptions, restrictions, and any special notification or assistance requirements beyond the notification requirements described in the Procedural Overview above. As stated, PDC are intended to ensure projects, individually, and cumulatively, are not likely to adversely affect the NOAA Fisheries listed species and critical habitat analyzed under this program. As such, any project to be authorized and concurred with under this program must meet the applicable criteria for their activity type listed herein.

Sound Pressure

Activity types that may cause increases in sound pressure include: pile supported structure construction/maintenance and repair (docks, piers, fenders, dolphins, bridges, temporary structures, removal of piles, etc.), shoreline stabilization (revetments, bulkheads, etc.), etc.

^{*}Best available river kilometer information regarding spawning and overwintering grounds for Atlantic salmon, shortnose sturgeon, and Atlantic sturgeon is found within the species tables provided by GARFO at:

PDC:

- 12. If the pile driving is occurring during a time of year when ESA-listed species may be present, and the anticipated noise is above the behavioral noise threshold of those species, a 20 minute "soft start" is required to allow for animals to leave the project vicinity before sound pressure increases.
- 13. Any new pile supported structure must involve the installation of ≤ 50 piles (below MHW).
- 14. If the project involves steel piles, or non-steel piles greater than (>) 24-inches in diameter, or any other noise-producing mechanism, the expected underwater noise (pressure) must be below (<) the physiological/injury noise threshold for ESA-species in the action area.

Noise Criteria:

Fish:

- a) Peak Sound Pressure Level (SPL): 206 dB re 1 μPa (injury)
- b) Cumulative Sound Exposure Level (cSEL): 187 dB re 1μ Pa2-s for fishes above 2 grams and cSEL: 183 dB re 1μ Pa2-s for fishes below 2 grams (injury)
- c) Behavioral Disturbance: levels ≥150 dB re 1 µPa RMS

Sea Turtles:

- a) Injury: Levels ≥ levels 180 dB re 1µPa RMS
- b) Behavioral Disturbance: levels ≥ 166 dB re 1µPa RMS

Whales:

- a) Behavioral Disturbance (non-pulse): levels \geq 120 dB re 1 μ PA RMS
- b) Behavioral Disturbance (impulsive): levels ≥ 160 dB re 1 µPA RMS

Steel Piles (or non-steel piles and steel sheet piles >24")

USACE will be responsible for showing that proposed pile installation work will not create isopleths that will adversely affect any behavior of ESA-listed species (i.e., PDC 8, must not create a barrier for passage for species that are migrating through the action area). USACE can make these determinations using GARFO's Acoustic Tool (available at:

https://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/consultation/index.html), or using other methods that rely upon the best available information.

USACE must provide the information they use to make these determinations with their completed verification form. If GARFO does not agree with a determination, the project must undergo individual consultation.

For any pile driving involving ESA-listed whales (including non-steel piles and steel sheet piles < 24")

If ESA-listed whales are in the action area, USACE will be responsible for showing that proposed pile installation work will not create isopleths that will adversely affect any behavior or ESA-listed whales (i.e., create a barrier for passage for species that are migrating through the action area). The Corps can make these determinations using GARFO's Acoustic Tool (available at:

https://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/consultation/index.html), or using other methods that rely upon the best available information.

USACE will also need to use the GARFO user spreadsheet for calculating the effect distances (i.e., isopleths) from a source for marine mammal permanent threshold shift (PTS) onset thresholds (available at: http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm). Using this spreadsheet, USACE must show that proposed pile driving will not injure listed cetaceans.

USACE must provide the information they use to make these determinations with their completed verification form. If GARFO does not agree with a determination, the project must undergo individual consultation.

Impingement/Entrapment/Capture

Activity types that may increase the risk of impingement/entrainment: small scale dredging projects (maintenance dredging within access channels, marinas, etc., dredging for boat ramps, docks/piers, bridge maintenance, aquaculture shell dredging, etc.), temporary intakes/dewatering as part of construction projects, etc.

PDC:

- 15. Only mechanical, cutterhead, and low volume hopper (e.g., CURRITUCK) dredges may be used
- 16. No new dredging in proposed or designated Atlantic sturgeon or Atlantic salmon critical habitat (maintenance dredging still must meet all other PDCs). New dredging outside Atlantic sturgeon or salmon critical habitat is limited to one-time dredge events (e.g., burying a utility line) and minor (≤2 acres) expansions of areas already subject to maintenance dredging (e.g., marina/harbor expansion).
- 17. Work behind cofferdams, turbidity curtains, and other methods to block access of animals to dredge footprint is required when operationally feasible and ESA-listed species may be present.
- 18. Temporary intakes related to construction must be equipped with appropriate sized mesh screening (as determined by GARFO section 7 biologist and/or according to Chapter 11 of the NOAA Fisheries Anadromous Salmonid Passage Facility Design)) and must not have greater than 0.5 fps intake velocities, to prevent impingement or entrainment of any ESA-listed species life stage.
- 19. No new permanent intake structures related to cooling water, or any other inflow at facilities (e.g. water treatment plants, power plants, etc.).

Turbidity/Water Quality

Activity types that may increase the turbidity and affect water quality include: dredging activities, disposal/beach nourishment, pile driving, shoreline stabilization projects (e.g., marsh creation, shoreline repair, artificial reef creation), in-water construction (e.g., boat ramps, bulkheads, revetments, etc.), temporary discharges from construction sites, runoff related to bridge repair activities, etc.

PDC:

- 20. Work behind cofferdams, turbidity curtains, or other methods to control turbidity are required when operationally feasible and ESA-listed species may be present.
- 21. In-water offshore disposal may only occur at designated disposal sites that have already been consulted on with GARFO.
- 22. Any temporary discharges must meet state water quality standards; no discharges of toxic substances.
- 23. Only repair of existing discharge pipes allowed; no new construction.

Entanglement

Activity types that may increase the risk of entanglement include: aquaculture gear, mooring buoys and floats, temporary floats, etc.

PDC:

- 24. Shell on bottom <50 acres with maximum of 4 corner marker buoys;
- 25. Cage on bottom with no loose floating lines <5 acres and minimal vertical lines (1 per string of cages, 4 corner marker buoys);
- 26. Floating cages in <3 acres in waters and shallower than -10 feet MLLW with no loose lines and minimal vertical lines (1 per string of cages, 4 corner marker buoys);
- 27. Floating upweller docks in >10 feet MLLW
- 28. Any in-water lines, ropes, or chains must be made of materials and installed in a manner (properly spaced) to minimize the risk of entanglement by keeping lines taut or using methods to promote rigidity (e.g., sheathed or weighted lines that do not loop or entangle).

Habitat Modification

Activity types that may affect habitat for listed species include: dredging activities, in-water construction and pile driving (e.g., docks/piers, boat ramps, marinas, bridges, revetments, bulkheads, dolphins, fenders, etc.), shoreline stabilization, aquaculture activities, moorings/buoys, temporary floats or structures, etc.²

PDC:

29. No conversion of habitat type (soft bottom to hard, or vice versa) for aquaculture or reef creation.

Vessel Traffic

Activity types that may increase the risk of vessel interactions with listed species: dredging and

² While PDC 29 is specific to aquaculture, other PDC found in the General and stressor-specific PDC sections address and limit adverse effects to habitat used by ESA-listed species, including proposed and designated critical habitat. For an analysis of how GARFO expects the 2017 NLAA Program to impact ESA species' habitat, please see GARFO's programmatic consultation document.

disposal activities, in-water construction (docks/piers, boat ramps, marinas, bridges, etc.), artificial reef creation, aquaculture activities, temporary activities (e.g., boat races, etc.), etc. *PDC*:

- 30. Speed limits below 10 knots for project vessels with buffers of 150 feet for all listed species (1,500 feet for right whales).
- 31. While dredging, dredge buffers of 300 feet in the vicinity of any listed species (1,500 feet for right whales), with speeds of 4 knots maximum.
- 32. The number of project vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.
- 33. A project must not result in the permanent net increase of commercial vessels (e.g., a ferry terminal). The permanent net increase in vessels resulting from a residential project (e.g., dock/float/pier) must not exceed two vessels.

Projects involving offshore disposal of dredged material are only eligible under this programmatic if there is an existing consultation on the disposal site (PDC 21). In those cases, USACE must require all of the ESA permit conditions outlined in those consultations (e.g., vessels would need to abide by all permit conditions described in the GARFO-USACE consultation for the Cape Cod Bay Disposal Site).